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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,801	08/01/2003	Keimpe Jan Van Den Berg	116774	2002
25944	7590	07/26/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			MCCLENDON, SANZA L	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/631,801	<b>Applicant(s)</b> VAN DEN BERG ET AL.	
	<b>Examiner</b> Sanza L. McClendon	<b>Art Unit</b> 1711	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 11-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 12, 16-19 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 13-15 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Response to Amendment*

1. In response to the Amendment received on May 9, 2005, the examiner has carefully considered the amendments. The examiner acknowledges the cancellation of claim 10.

### *Response to Arguments*

2. Applicant's arguments filed May 9, 2005 have been fully considered but they are not persuasive. However, applicant's amendment has overcome the following rejections: the rejection of claims 1, 3, 5-7, 9, 11-14, 16-17 and 19 under 35 USC 103(a) as unpatentable over Ichikawa et al (4,906,498). The rejection of claim 23 under 35 USC 102(b) as being anticipated by Rayner et al (EP 0 936 249). The rejection of claims 1, 3-7, 11, 13-17 and 21 under 35 USC 102(b), or in the alternative, under 35 USC 103(a) as unpatentable over Boba et al (4,361,626). The rejection of claims 1-2, 5-12, 16-17, 19, and 21-22 under 35 USC 102(b) or, in the alternative, under 35 USC 103(a) as being unpatentable over Delaney et al (4,619,746) still stands. The examiner deems that claim 23 is anticipated by this reference and therefore it will be added. As a consequence the Office Action will be made non-final because of this new grounds of rejection for claim 23—see below response to arguments and the rejection.

Applicant argues that Delaney does not teach that the base coat comprises an “effective number” of thiol groups, as set forth in claim 1 but rather teaches a basecoat that may comprise hydroxyl, thiol and amine groups, which applicant suggest Delaney teaches are equivalent and provide the same technical effect. The examiner disagrees. While Delaney teaches the hydrogen active functional groups can be hydroxyl, amine or thiol, it is within the teachings of the reference and within the skill level of an ordinary artisan to use/make a laminate comprising only the use of thiol (mercaptan) groups as the hydrogen active functional material. With regard to applicant's argument that Delaney does not contain “an effective amount” of thiol groups, applicant has not clearly defined the metes and bounds of “an effective amount”. The examiner is interpreting the “effective amount” to be at least one. Therefore the reference reads on applicant's “effective amount”. With regard to arguments regarding Delaney not achieving “increased hardness” is not persuasive since these limitations are not claimed. With regard to applicant's amendment regarding the method of application, i.e., rolling, brushing, spraying, flow coating, dipping or roller coating, is not sufficient to overcome the rejection.

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Regarding claim 23, it is deemed that Delaney teaches that the aqueous basecoat comprising a thiol-containing base coat that can comprise additional additives—see column 2. Therefore it would have been obvious for an artisan of ordinary skill in the art to add a sag control additive, as found in the topcoat examples—Microgel (polyacrylates dispersion), to the base coat. The motivation would have been a reasonable expectation of successful applying an even basecoat in the absence of evidence to the contrary. Therefore it is deemed that Delaney et al renders obvious claim 23. This would also render claims 3-4 and 18 obvious.

Claims 13-15 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Claim Rejections - 35 USC § 102/35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-9 and 11-12, 16-19 and 21-23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Delaney et al (4,619,746).

Delaney et al teaches processes for top-coating electro-coated metal substrates using wet-on-wet methods proving for improved visual appearance and exhibits improved film durability of the finished products. Said process involves 1) electrophoretically applying a basecoat on a substrate; wherein said base coat comprises an aqueous dispersion of a binder resin comprising active hydrogen atoms; which appears to read on claim 19, a crosslinking agent and additives, 2) drying the substrate to evaporate residual water and volatile materials, 3) non-electrophoretically applying a top coating comprising a low molecular weight active hydrogen material, a blocked isocyanates, cure catalyst, and other additives, 4) and curing the coated substrate. Said active hydrogen material in the base coat can be resinous polyols, polyamines, epoxy resins, polyurethanes, and the like with hydrogen containing functional groups, such as hydroxyl, amine, and mercaptan functional groups. The same resins and functional groups can be used in the top-coat, in addition, to those listed in column 3, lines 10-12, wherein the teaching of a resin in combination with the blocked isocyanate appears to read on claim 8. This appears to read on claim 10, when mercaptan groups are selected as the active hydrogen functionality in the base coat. Per examples it appears that other resins can be added as additives to control properties, such as the addition of the acrylic polymer, Microgel, used for sag control. This appears to read on the second resin in claim 9. Said cure catalyst in the topcoat can be a compound such as tin octoate and dibutyltin dilaurate. This

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appears to read on claims 11-12. Said top-coatings can be clear or pigmented—see column 3, lines 23. Thus the examiner deems that claim 21 is read in the reference. Per the examples it appears the top-coating compositions are solvent borne compositions, which appears to read on claim 17. While Delaney does not explicitly teach using resins having and/or in combination with an effective amount of thiol groups it is taught by Delaney et al in such a way that an artisan of ordinary skill in the art could have prepared/used such the binder having active hydrogen functional groups from the teachings of materials cited for use in the base coating composition, thusly the examiner deems claims 1-2 and 7 are read in the reference. The lack of teaching a curing agent in the base coat appears to read on claim 16. The blocked isocyanate groups in the top-coating composition appear to read on claims 5-6.

Regarding claim 23, it is deemed that Delaney teaches that the aqueous basecoat comprising a thiol-containing base coat that can comprise additional additives—see column 2. Therefore it would have been obvious for an artisan of ordinary skill in the art to add a sag control additive, as found in the topcoat examples—Microgel (polyacrylates dispersion), to the base coat. The motivation would have been a reasonable expectation of successful applying an even basecoat in the absence of evidence to the contrary. Therefore it is deemed that Delaney et al renders obvious claim 23.

While Delaney et al does not expressly teach finishing or refinishing automobile or large transportation substrates, Delaney et al teaches said multi-layer coating systems can be used to coat metal substrates in a wet-on-wet application with a single curing step. Therefore the examiner deems that the coatings taught by Delaney et al are taught such that an artisan of ordinary skill in the art would have had a reasonable expectation of successfully coating a metal surface, such as an automobile part or section, to obtain a good aesthetic appearance, as well as, a protected surface in the absence of unexpected results and/or convincing arguments to the contrary—see column 1, lines 15-20.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Sanza L. McClendon 7/25/08".

Sanza L. McClendon

Examiner

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SMc